

Table 10-3
Action-Specific ARARs
Investigation Area H1
Mare Island, Vallejo, California

Location/Requirement	Citation ^a	ARAR Determination	Comments
FEDERAL			
Resource Conservation and Recovery Act (42 U.S.C. §§ 6901–6991[i])^b			
On-site waste generation Person who generates waste shall determine if that waste is a hazardous waste.	Cal. Code Regs. tit. 22, § 66262.10(a), 66262.11	Applicable	Applicable for any operation where hazardous waste is generated. Applicable for removal and off-site disposal of any generated waste, including groundwater from the extraction trench and contaminated remedial equipment. The determination of whether wastes generated during remedial activities are hazardous will be made at the time the wastes are generated.
On-site waste generation Requirements for analyzing waste for determining whether waste is hazardous.	Cal. Code Regs. tit. 22, § 66264.13(a) and (b)	Applicable	See above.
Hazardous waste accumulation On-site hazardous waste accumulation is allowed for up to 90 days as long as the waste is stored in containers in accordance with § 66262.171–178 or in tanks, on drip pads, inside buildings, is labeled and dated, etc.	Cal. Code Regs. tit. 22, § 66262.34	Applicable	Applicable for removal and off-site disposal of any generated waste including groundwater from the extraction trench and contaminated remedial equipment. The determination of whether wastes generated during remedial activities are hazardous will be made at the time the wastes are generated.
Site Closure Minimize the need for further maintenance controls and minimize or eliminate, to the extent necessary to protect human health and the environment, post closure escape of hazardous waste, hazardous constituents, leachate, contaminated rainfall or runoff, or waste decomposition products to groundwater or surface water or to the atmosphere.	Cal. Code Regs. tit. 22, § 66265.111(a) and (b)	Applicable	The interim status RCRA-regulated units will require closure. The RCRA landfill closure requirements (Cal. Code Regs. title 22, § 66264.111 and 66264.310) are general performance standards that eliminate the need for further maintenance and control and eliminate post-closure escape of hazardous wastes, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products. The grading conducted for the capping/cover options at IA H1 does not constitute placement or disposal under RCRA and, therefore, the generator requirements for hazardous waste determinations contained in Cal. Code Regs. title 22, § 66265.310 are not triggered.
General landfill closure requirements	Cal. Code Regs. tit. 22, § 66265.310	Relevant and Appropriate	

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Point of compliance The POC is a vertical surface, located at the hydraulically downgradient limit of the waste management area that extends through the uppermost aquifer underlying the regulated unit.	Cal. Code Regs. tit. 22, § 66265.95	Applicable	Applicable to the RCRA-regulated units within the Containment Area.
CAMU An area at a RCRA facility may be designated as a CAMU. Placement of remediation wastes into or within a CAMU does not constitute land disposal of hazardous wastes nor creation of a unit subject to minimum technology requirements or LDR	Cal. Code Regs. tit. 22, § 66264.552(c) and (e)	Applicable	<p>Substantive CAMU regulations will be complied with for consolidation of materials such as the Marine Corps Firing Range Material and other DTSC approved materials into the containment area of IA-H1. The procedural aspects of the CAMU regulations are not ARARs. Consolidation of soils having similar or less contamination than the current material currently present in the Containment Area for use as a base material for final cap placement will facilitate the implementation of reliable, effective, protective, and cost effective correction action measures at IA-H1, the Marine Corps Firing Range and other Mare Island Sites.</p> <p>The selected remedy of Containment for the IA-H1 area meets requirements consistent with containing this similar material including capping, groundwater containment, groundwater monitoring and post-closure requirements.</p>

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Monitoring Requirements for monitoring groundwater, surface water, and the vadose zone.	Cal. Code Regs. tit. 22, § 66265.97 (a)	Applicable	Applicable to the RCRA-regulated units within the Containment Area.
Monitoring Requirements for a detection monitoring program.	Cal. Code Regs. tit. 22, § 66265.98(b), (c), (f), (g), and (i)	Applicable	Applicable to the RCRA-regulated units within the Containment Area.
Monitoring Requirements for an evaluation monitoring program.	Cal. Code Regs. tit. 22, § 66264.99(b), (c), (e), (f), and (g)	Applicable	Applicable to the RCRA-regulated units within the Containment Area.
Corrective action The owner or operator required to take corrective action under Cal. Code Regs. tit. 22, § 66264.91 shall take corrective action to remediate releases from the regulated unit and to ensure that the regulated unit achieves compliance with the water quality protection standard.	Cal. Code Regs. tit. 22, § 66264.100(b)	Applicable	Applicable to the RCRA-regulated units within the Containment Area.
Monitoring The owner or operator shall establish and implement, in conjunction with the corrective action measures, a water quality monitoring program that will demonstrate the effectiveness of the corrective action program and be effective in determining compliance with the water quality protection standard and in determining the success of the corrective action measures under subsection (c) of this section.	Cal. Code Regs. tit. 22, § 66264.100(d)	Applicable	Applicable for the interim status RCRA-regulated units.

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Completion of response action The corrective action program is complete when compliance with the water quality standard is demonstrated based on the results of sampling and analysis for all constituents of concern for a period of 1 year.	Cal. Code Regs. tit. 22, § 66264.100(g)(1)	Applicable	Applicable for the interim status RCRA-regulated units.
Clean Water Act, as Amended (33 U.S.C., ch. 26, §§ 1251–1387)^b			
Discharge to surface waters Owners and operators of construction activities must be in compliance with discharge standards.	CWA Section 402 (33 U.S.C. ch. 26, § 1342)	Applicable	Construction activities will be managed to meet standards regarding discharge to surface waters.
All direct dischargers meet technology-based requirements including the best control technology and the best available technology economically achievable.	CWA Section 301(b) (33 U.S.C. ch. 26, § 1311)	Applicable	Applicable for construction activities that will be managed to meet standards regarding discharge to surface waters.
Federal Hazardous Materials Transportation Law (49 U.S.C. §§ 5101–5127)^b			
Transportation of hazardous material No person shall represent that a container or package is safe unless it meets the requirements of 49 U.S.C. §§ 5101–5127.	49 C.F.R. § 171.2(f)	Relevant and Appropriate	Potentially relevant and appropriate if off-site disposal of generated waste occurs.
No person shall unlawfully alter or deface labels, placards or descriptions, packages, containers, or motor vehicles used for transportation of hazardous materials.	49 C.F.R. § 171.2(g)	Relevant and Appropriate	Potentially relevant and appropriate if off-site disposal of generated waste occurs.
Each person who offers hazardous material for transportation or each carrier that transports it shall mark each package, container, and vehicle in the manner required.	49 C.F.R. § 172.300	Relevant and Appropriate	Potentially relevant and appropriate if off-site disposal of generated waste occurs.

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Each person offering nonbulk hazardous materials for transportation shall mark the proper shipping name and identification number (technical name) and consignee's name and address.	49 C.F.R. § 172.301	Relevant and Appropriate	Potentially relevant and appropriate if off-site disposal of generated waste occurs.
Hazardous materials marking, labeling, and placarding Hazardous materials for transportation in bulk packages must be labeled with proper ID number, specified in 49 C.F.R. § 172.101 table, with required size of print. Packages must remain marked until cleaned or refilled with material requiring other marking.	49 C.F.R. § 172.302	Relevant and Appropriate	Potentially relevant and appropriate if off-site disposal of generated waste occurs.
Hazardous materials marking, labeling, and placarding No package marked with a proper shipping name or ID number may be offered for transport or transported unless the package contains the identified hazardous material or its residue.	49 C.F.R. § 172.303	Relevant and Appropriate	Potentially relevant and appropriate if off-site disposal of generated waste occurs.
Hazardous materials marking, labeling, and placarding The markings must be durable, in English, in contrasting colors, unobscured, and away from other markings.	49 C.F.R. § 172.304	Relevant and Appropriate	Potentially relevant and appropriate if off-site disposal of generated waste occurs.
Hazardous materials marking, labeling, and placarding Nonbulk combination packages containing liquid hazardous materials must be packed with closures upward, and marked with arrows pointing upward.	49 C.F.R. § 172.312	Relevant and Appropriate	Potentially relevant and appropriate if off-site disposal of generated waste occurs.
Hazardous materials marking, labeling, and placarding Labeling of hazardous material packages shall be as specified in the list.	49 C.F.R. § 172.400	Relevant and Appropriate	Potentially relevant and appropriate if off-site disposal of generated waste occurs.

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Hazardous materials marking, labeling, and placarding Each bulk packaging or transport vehicle containing any quantity of hazardous material must be placarded on each side and each end with the type of placards listed in Tables 1 and 2 of 49 C.F.R. § 172.504.	49 C.F.R. § 172.504	Relevant and Appropriate	Potentially relevant and appropriate if off-site disposal of generated waste occurs.
CERCLA Off-Site Rule (40 C.F.R. § 300.440)^b			
Disposal of CERCLA wastes off-site CERCLA wastes may only be placed in a facility operating in compliance with RCRA or other applicable Federal or State requirements. That section further prohibits the transfer of CERCLA wastes to a land disposal facility that is releasing contaminants into the environment, and requires that any releases from other waste management units must be controlled.	40 C.F.R. § 300.440	Applicable	Potentially applicable if off-site disposal of generated waste occurs.
California Civil Code^b			
Land-use controls Provides conditions under which land-use restrictions will apply to successive owners of land.	Cal. Civ. Code § 1471	Relevant and Appropriate	DON is not scheduled to transfer IA H1 to another party. Potential ARAR where the DON is transferring property to a nonfederal agency. Substantive provisions are the following general narrative standard: “to do or refrain from doing some act on his or her own land where (c) Each such act relates to the use of land and each such act is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence of hazardous materials, as defined in Section 25260 of the California Health and Safety Code.” This narrative standard would be implemented through incorporation of restrictive covenants in the deed at the time of transfer.
Allows DTSC to enter into an agreement with the owner of a hazardous waste facility to restrict present and future land uses.	Cal. Health & Safety Code § 25202.5	Relevant and Appropriate	Potential ARAR for future transfers. The substantive provisions of Cal. Health & Safety Code § 25202.5 are the general narrative standards to restrict “present and future uses of all or part of the land on which the facility is located”.

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STATE			
California Fish and Game Code^b			
Projects within the state shall not jeopardize the existence of any endangered or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with preserving the species or its habitat that would prevent jeopardy.	Cal. Fish & Game Code § 1900, 1908, 2053, and 2080	Applicable	IA H1 provides habitat and supports the salt marsh harvest mouse. Remedial actions to be taken will be mitigated and are not expected to have any long-term impacts on threatened or endangered species. The mitigation will result in increased quantity and quality of habitat.
Prohibits the taking of birds and mammals, including the taking by poison.	Cal. Fish & Game Code § 3005(a)	Relevant and Appropriate	Procedural aspects are not ARARs; certain substantive provisions pertaining to take of birds or mammals with a poisonous substance are applicable. The selected remedy will prevent “take” of birds and mammals by containing contaminants and severing the pathway of exposure to contaminated soil or removing contaminants below harmful levels.
Projects that destroy wetlands, at a minimum, project mitigation assures there will be “no net loss” of either wetland habitat values or acreage.	Cal. Fish & Game Wetland Policy	TBC	This policy requires Fish and Game to oppose projects unless mitigation measures insure a minimum of ‘no net loss’ of wetland value or habitat. The H1 project meets the no net loss policy by providing at least a one to one mitigation with enhance value and acreage.
California Integrated Waste Management Act of 1989 PRC 40502, 43020, 43021, and 43030^b			
Site Security: the site shall be designed to discourage unauthorized access by persons or vehicles by using a perimeter barrier or topographic constraints. Areas within the site where open storage or ponding of hazardous materials occurs shall be separately fenced.	Cal. Code Regs. tit. 27, § 20530, Div. 2, Subdiv. 1, Ch. 3, Subch. 4, Art. 1, Sec. 20530, Site Security	Relevant and Appropriate	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.

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Roads: landfill roads must minimize dust and tracking of materials onto public roads. Such roads shall be kept in safe condition and maintained such that vehicle access and unloading can be conducted during inclement weather.	Cal. Code Regs. tit. 27, § 20540, Div. 2, Subdiv. 1, Ch. 3, Subch. 4, Art. 1, Sec. 20540, Roads	Relevant and Appropriate	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.
Confined Unloading: unloading of solid wastes shall be confined to as small an area as possible without resulting in traffic, personnel or public safety hazards. Requires normal deposition of waste at toe of fill.	Cal. Code Regs. tit. 27, § 20630, Div. 2, Subdiv. 1, Ch. 3, Subch. 4, Art. 1, Sec. 20630, Confined Unloading	Relevant and Appropriate	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.
Spreading and Compacting: Requires spreading and compacting of refuse in layers.	Cal. Code Regs. tit. 27, § 20640, Div. 2, Subdiv. 1, Ch. 3, Subch. 4, Art. 1, Sec. 20640, Spreading and Compacting	Relevant and Appropriate	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.
Nuisance Control: Each site shall be operated and maintained so as not to create a public nuisance.	Cal. Code Regs. tit. 27, § 20760, Div. 2, Subdiv. 1, Ch. 3, Subch. 4, Art. 1, Sec. 20760, Nuisance Control	Relevant and Appropriate	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.
Burning Wastes: Burning wastes shall be extinguished.	Cal. Code Regs. tit. 27, § 20780(b), Div. 2, Subdiv. 1, Ch. 3, Subch. 4, Art. 4, Sec. 20780(b), Open Burning & Burning Wastes	Relevant and Appropriate	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.
Dust Control: The operator shall take adequate measures to minimize the creation of dust and prevent safety hazards due to obscured visibility.	Cal. Code Regs. tit. 27, § 20800, Div. 2, Subdiv. 1, Ch. 3, Subch. 4, Art. 4, Sec. 20800, Dust Control	Relevant and Appropriate	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.

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Vector and Bird Control: The operator shall take adequate measures to control or prevent the propagation, harborage, or attraction of flies, rodents, or other vectors, and to minimize bird problems.	Cal. Code Regs. tit. 27, § 20810, Div. 2, Subdiv. 1, Ch. 3, Subch. 4, Art. 4, Sec. 20810, Dust Control	Relevant and Appropriate	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.
Drainage and Erosion Control: The drainage system shall be designed and maintained to: ensure integrity of roads, structures, and gas monitoring and control systems; prevent safety hazards; and prevent exposure of waste.	Cal. Code Regs. tit. 27, § 20820, Div. 2, Subdiv. 1, Ch. 3, Subch. 4, Art. 4, Sec. 20820, Drainage and Erosion Control	Relevant and Appropriate	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.
Litter Control: Litter and loose materials shall be routinely collected and disposed of properly.	Cal. Code Regs. tit. 27, § 20830, Div. 2, Subdiv. 1, Ch. 3, Subch. 4, Art. 4, Sec. 20830, Grading of Fill Surface	Relevant and Appropriate	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.
Gas Control: The operator shall cause the site to be monitored for the presence and movement of landfill gas and take any necessary action to control such gases in the event that the gas causes a hazard or nuisance.	Cal. Code Regs. tit. 27, § 20919, Div. 2, Subdiv. 1, Ch. 3, Subch. 4, Art. 6, Sec. 20919, Gas Control	Relevant and Appropriate	Applies to solid waste disposal sites as defined by Public Resources Code Section 40122.
Emergency Response: potential emergency conditions that may exceed the design of the site and could endanger the public health or environment must be anticipated. Response procedures for these conditions must be addressed in the RD/RA plans.	Cal. Code Regs. tit. 27, § 21130, Ch. 3, Subch. 5, Art. 2, Closure & Postclosure Maint. Standards for Disposal Sites and Landfills	Relevant and Appropriate	Closure or Postclosure Maintenance Standards for Disposal Sites and Landfills of Cal. Code Regs. tit. 27, Ch. 3, Subch. 5, Art. 2. Scope & Applicability pursuant to Cal. Code Regs. tit. 27, § 2110.
Site Security: all points of access to the site must be restricted, except permitted entry points. All monitoring, control, and recovery systems shall be protected from unauthorized access.	Cal. Code Regs. tit. 27, § 21135, Ch. 3, Subch. 5, Art. 2, Closure & Postclosure Maint. Standards for Disposal Sites and Landfills	Relevant and Appropriate	Closure or Postclosure Maintenance Standards for Disposal Sites and Landfills of Cal. Code Regs. tit. 27.

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Final Cover: the final cover shall function with minimum maintenance and provide waste containment to protect public health and safety by controlling at a minimum, vectors, fire, odor, litter, and landfill gas migration. The final cover shall also be compatible with post closure land use.	Cal. Code Regs. tit. 27, § 21140, Ch. 3, Subch. 5, Art. 2, Closure & Postclosure Maint. Standards for Disposal Sites and Landfills	Relevant and Appropriate	Closure or Postclosure Maintenance Standards for Disposal Sites and Landfills of Cal. Code Regs. tit. 27.
Drainage and Erosion Control: the drainage and erosion control system shall be designed and maintained to ensure integrity of postclosure land uses, roads, and structures; to prevent public contact with waste and leachate; to ensure integrity of gas monitoring and control systems; to prevent safety hazards; and to prevent exposure of waste.	Cal. Code Regs. tit. 27, § 21150, Ch. 3, Subch. 5, Art. 2, Closure & Postclosure Maint. Standards for Disposal Sites and Landfills	Relevant and Appropriate	Closure or Postclosure Maintenance Standards for Disposal Sites and Landfills of Cal. Code Regs. tit. 27.
Landfill Gas Control and Leachate Contact: landfill gas control shall be implemented and maintained; leachate must be collected and controlled in a manner which prevents public contact and controls vectors, nuisance and odor.	Cal. Code Regs. tit. 27, § 21160, Ch. 3, Subch. 5, Art. 2, Closure & Postclosure Maint. Standards for Disposal Sites and Landfills	Relevant and Appropriate	Closure or Postclosure Maintenance Standards for Disposal Sites and Landfills of Cal. Code Regs. tit. 27, Ch. 3, Subch. 5, Art. 2. Scope & Applicability pursuant to Cal. Code Regs. tit. 27 § 2110. The state does not intend that subsurface leachate monitoring and collecting systems need to be added to existing landfills unless leachate production and/or accumulation is evident.
Gas Monitoring and Control During Closure and Postclosure: to protect public health and safety and the environment, landfill gases generated at a disposal site will be controlled to ensure that: 1) concentrations of methane gas do not exceed 1.25% by volume in air within on-site structures, 2) concentrations of methane do not exceed 5% by volume in air at the property or designated landfill boundary and 3) trace gases do not pose an acute or chronic exposure to toxic or carcinogenic compounds.	Cal. Code Regs. tit. 27, § 20921-20937, Ch. 3, Subch. 4, Art. 6, Closure & Postclosure Maint. Standards for Disposal Sites and Landfills	Relevant and Appropriate	Closure or Postclosure Maintenance Standards for Disposal Sites and Landfills of Cal. Code Regs. tit. 27.

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Postclosure Maintenance: the landfill must be maintained and monitored for no less than 30 years following closure.	Cal. Code Regs. tit. 27, § 21180, Ch. 3, Subch. 5, Art. 2, Closure & Postclosure Maint. Standards for Disposal Sites and Landfills	Relevant and Appropriate	Closure or Postclosure Maintenance Standards for Disposal Sites and Landfills of Cal. Code Regs. tit. 27.

Location/Requirement	Citation ^a	ARAR Determination	Comments
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Bay Area Air Quality Management District (BAAQMD)^b			
This regulation specifies landfill gas collection and emission control system requirements including construction standards, administrative requirements, monitoring and record keeping requirements, and operation procedures.	BAAQMD, Regulation 8 - Organic Compound, Rule 34 – Solid Waste Disposal Sites	Relevant and Appropriate	Applicable to the control of landfill emissions from a stationary source if the amount of emissions meets the regulatory requirements.
This rule requires that a person shall not discharge into the atmosphere from any miscellaneous operation an emission containing more than 6.8 kilograms (15 pounds) per day and containing a concentration of more than 300 parts per million of total carbon on a dry basis.	BAAQMD, Regulation 8 - Organic Compound, Rule 2 – Miscellaneous Operations	Relevant and Appropriate	Total carbon in an emission is the sum of the total carbon of all of the individual organic compounds present in the effluent. However, 1,1,1-trichloroethane, methylene chloride, methane and chlorofluorocarbons shall not be included in the calculation of total carbon.

Notes:

^a Only the substantive provisions of the requirements cited in this table are potential ARARs.

^b Statutes and policies, and their citations, are provided as headings to identify general categories of potential ARARs for the convenience of the reader; listing the statutes and policies does not indicate that the DON accepts the entire statutes or policies as potential ARARs; specific potential ARARs are addressed in the table below each general heading; only substantive requirements of the specific citations are considered potential ARARs.

Acronyms/Abbreviations:

ARAR – applicable or relevant and appropriate requirement
 Art. – article
 BAAQMD – Bay Area Air Quality Management District
 Cal. Civ. Code – *California Civil Code*

Cal. Code Regs. – *California Code of Regulations*
 CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
 C.F.R. – *Code of Federal Regulations*

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ch. – chapter
CWA – Clean Water Act
Div. – division
DON – Department of the Navy
DTSC – California Department of Toxic Substances Control
IA – Investigation Area
POC – point of compliance
PRC – Public Resources Code
RCRA – Resource Conservation and Recovery Act
RD/RA – Remedial Design/Remedial Action
§ – section
§§ – subsection
Sec. – section
Subdiv. – subdivision
Subch. – subchapter
Subpara. – subparagraph
SWRCB – State Water Resources Control Board
TBC – to be considered
tit. – title
U.S.C. – United States Code